



January 8, 2009

Mr. Brian Hancock
U.S. Election Assistance Commission
Voting System Testing and Certification Program
1225 New York Avenue, NW, Suite 110
Washington, DC 20005

Sent via E-mail

Mr. Hancock,

The purpose of this letter is to document the review of the Environmental Test results in accordance with your 20 November 2008 letter providing instruction on the reuse of testing for the Premier certification effort. iBeta has completed the audit of the Environmental testing and results reports submitted by SysTest to the EAC as appendices to the Premier Assure™ 1.2 Draft Test Report Revision 01 dated 22 February 2008. This letter also provides the iBeta recommendation to the EAC regarding the acceptance and reuse of the sub-contracting laboratory hardware reports developed and provided under contract to SysTest.

Documentation of the Hardware Reports Review

To conduct the review, iBeta used the SysTest Attachment H to the Premier Assure™ 1.2 Draft Test Report (Rev. 01 2/22/08) as the basis for the review materials. Each of the documents called out in that matrix was reviewed and any comments or questions identified. Research was conducted to resolve each issue. In addition to the Operating and Non-Operating Environmental tests, the Reliability testing (163 hour test) was also reviewed for documentation to allow for test results reuse.

The matrix as well as the full analysis is provided as Attachment 1 to this letter.

Summary of Review Results

TSX: With the exception of the Electrostatic Discharge (ESD) testing, the test reports provided documented adequate environmental testing in accordance with the VSS requirements. Three of the TSX units that had undergone the ESD testing were not in working order when delivered from SysTest to iBeta. A Premier representative confirmed on-site (on 12/3/08) that the units were beyond field repair (in that changing out the inverter did not resolve the issue) and those units were shipped back for repair. Based on the unknown

failure mechanism of these devices and the lack of documentation as to whether these units were tested in audio mode, iBeta recommends ESD testing on the 3 models (A, C, and D) and acceptance for reuse on the remainder of the environmental test results including the 163 hour maintainability test.

OSAA: iBeta recommends reuse of all submitted environmental test results.

AutoMark A100 and A300: iBeta recommends reuse of all submitted environmental test results including the 163 hour maintainability test.

TS R6: The concern that the Serial Numbers (SN) recorded for the Equipment Under Test (EUT) in the ESD Test Reports (the SNs recorded are for TSXs not TS R6 Model A and B) is mitigated by the photographs within the report that clearly show a TS R6 and all units delivered from SysTest to iBeta are in working order,

OS: iBeta recommends reuse of all submitted environmental test results including the 163 hour maintainability test.

OSX: With the exception of the Ballot Box, iBeta recommends reuse of all submitted environmental test results including the 163 hour maintainability test.

Recommendation regarding the need to conduct a Hardware Environmental Testing

The iBeta recommendation based on the audit and review as documented herein is that the hardware environmental test results for all but the TSX Models A, C, and D and the OSX Ballot Box are adequate for reuse in the Premier Assure™ 1.2 certification test effort. Based on NOC 08-01, iBeta recommends executing the Electrostatic Discharge test on those components. Premier has agreed to this additional testing. Unless otherwise directed by the EAC, iBeta will proceed with the additional hardware testing as part of the certification test effort and reuse the remaining test reports.

Sincerely,



Gail Audette
iBeta Quality Manager

Attachment: Hardware Test Matrix and Review Details

cc: Tab Iredale, Premier Election Solutions
Kathy Rogers, Premier Election Solutions

Attachment H from the SysTest Labs Premier Assure™ 1.2 Certification Test Report Rev 02 with iBeta additional comments in blue.

VSS 2002 Hardware Tests Performed at: - Nemko and Wyle - Verified by Wyle and updated June 2007 - Percept, CIS, EMCi, APT and SysTest - Verified by SysTest February to April 2008								
Task (Requirements)	VSS Ref #	AccuVote-TSX Models A, B, C, D with AccuView Printer Module (AVPM)	Optical Scan Accumulator Adapter Note A	AutoMARK Voter Assist Terminal Model A100	AutoMARK Voter Assist Terminal Model A300	AccuVote-TS R6 DRE (FW 4.6.5) Models A & B Note C	AccuVote-OS Models A & D (FW 1.96.8) Note B	AccuVote- OSX 1.0.1 Model A
Non-Operating								
Safety Evaluation	3.4.8 (V1)	Diebold 52501-07.pdf pg 86: Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMark-A100- Safety-Report- Rev-1.pdf pg 2 (4/7/06) – CIS SN AM0205420004 Test run on 1/12/05	AutoMark-A100- Safety-Report- Rev-1.pdf pg 2 (4/7/06) – CIS but title is for the A100 and is the same report as the A100	Diebold 52501-04.pdf pg 3 (9/26/05) – Wyle – SN 156584 Test run on 9/26/05	Diebold 48619- 09 AVOS Revision B.pdf pg 19 (6/21/05) – Wyle – Model D only – Model 79811 SNs 34489 and 79602	PES-AVOSX- Safety-Report- 1.pdf pg 1 (2/28/08) – CIS SN listed as 014.
Non-Operating Environmental								
Bench Handling	4.6.2 (V2)	Diebold 48619-06.pdf pg 12 (3/16/05) – Wyle serial number	N/A	AutoMARK Vib and Bench Handling.pdf pg 11 (1/12/05) –	AutoMARK Vib and Bench Handling.pdf pg 11 (1/12/05) -	Prem TSR6 ENV Systest08- 00600.pdf pg	Diebold 48619-09 AVOS Revision B.pdf pg 16	Premier OSX Env Systest08- 00226.pdf pg 3 (12/7/07) –

Attachment: Hardware Test Matrix and Review Details

		242038 f/w 4.6.2 AVPM was pre-production test results appear ok		APT SN 002 with Percept (no SysTest personnel noted) and system determined to be operating correctly by Percept.	APT SN 002 with Percept (no SysTest personnel noted) and system determined to be operating correctly by Percept. – Same as A100	3 (4/14/08) APT SNs 126544	(4/11/05) – Wyle – Model D only – Model 79811 SNs 34489 and 79602	APT SN 11
Vibration	4.6.3 (V2)	Prem TSX ENV Systest08-00601.pdf pg 1 (4/14/08) – APT Model D only SN#283028 – Section 5.1 states that all OpStats performed by SysTest- no pass/fail recorded in that test report	N/A	Same as above.	Same as above.	Prem TSR6 ENV Systest08-00600.pdf pg 3 (4/14/08) APT SNs 153983 Test conducted with equipment in transport boxes	Prem AVOS ENV Systest08-00589.pdf pg 3 (4/16/08) – APT SN 34026	Premier OSX Env Systest08-00226.pdf pg 3 (12/7/07) – APT SN 11
Low Temp Storage	4.6.4 (V2)	Diebold 48619-06.pdf pg 12 (3/16/05) - Wyle serial number 242038 f/w 4.6.2 AVPM was pre-production – test	N/A	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) – Percept. Test	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) Percept. Test date in Jan 2005.	Prem TSR6 ENV Systest08-00600.pdf pg 3 (4/14/08) APT SNs 126544	Prem AVOS ENV Systest08-00589.pdf pg 3 (4/16/08) – APT SN 80787	Premier OSX Env Systest08-00226.pdf pg 3 (12/7/07) – APT SN 11

Attachment: Hardware Test Matrix and Review Details

		results appear ok		date in Jan 2005.	Same as A100			
High Temp Storage	4.6.5 (V2)	Diebold 48619-06.pdf pg 12 (3/16/05) - Wyle serial number 242038 f/w 4.6.2 AVPM was pre-production test results appear ok	N/A	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) – Percept. Test date in Jan 2005.	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) – Percept. Test date in Jan 2005. Same as A100	Prem TSR6 ENV Systest08-00600.pdf pg 3 (4/14/08) APT SNs 126544	Prem AVOS ENV Systest08-00589.pdf pg 3 (4/16/08) – APT SN 80787	Premier OSX Env Systest08-00226.pdf pg 3 (12/7/07) – APT SN 11
Humidity Storage	4.6.6 (V2)	Diebold 48619-06.pdf pg 225 (3/16/05) - Wyle serial number 242038 f/w 4.6.2 AVPM was pre-production test results appear ok	N/A	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) – Percept. Test date in Jan 2005.	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 11 (5/12/05) – Percept. Test date in Jan 2005. Same as A100	Prem TSR6 ENV Systest08-00600.pdf pg 3 (4/14/08) APT SNs 126544	Prem AVOS ENV Systest08-00589.pdf pg 3 (4/16/08) – APT SN 80787	Premier OSX Env Systest08-00226.pdf pg 3 (12/7/07) – APT SN 24
Operating Environmental								
Temp/Power Variation and Reliability	4.7.1 (V2)	Diebold 52501-07.pdf pg 16 (2/2/06) Model D only with AVPM 4.6.4 – Wyle test run 4/7/06 Serial number 259364, 250313, 271140, or 271160 – no indication of	N/A	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 13 (5/12/05) – Percept. Test date in Jan 2005.	AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf pg 13 (5/12/05) – Percept. Test date in Jan 2005. Same as A100	Prem TSR6 ENV Systest08-00600.pdf pg 3 (4/14/08) APT SNs 126544 and 153983	Diebold 48619-09 AVOS Revision B.pdf pg 16 (4/11/05) – Wyle – Model D only – Model 79811 SNs 34489 and	Premier OSX Env Systest08-00226.pdf pg 3 (12/7/07) – APT SN 11

Attachment: Hardware Test Matrix and Review Details

		machine operation					79602	
Other Environmental (Electrical Tests)								
Power Disturbance	4.8.1 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	– Criterion SN005 Same as A100	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758 (Model B) not a valid TS R6 SN	Diebold AVOS 1968 - 52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A and C were tested. SNs 34489 & 79602	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002
Electromagnetic Radiation	4.8.2 (V2)	Diebold 52501-07.pdf pg 27 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	Diebold 52501-05 OSAA.pdf pg83 (2/28/2005) – Wyle report but uses Nemko electrical test report Pg 94 Test run on 12/09/04 out side of the	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	Automark EMC 070730-1165.pdf pg 4 (8/1/07) – Criterion SN AM0307420125	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758 (Model B) Prem TSR6 ModA EMC 080331-1230.pdf pg 4 (4/4/08) –	Diebold AVOS 1968 -52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A and C were	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002

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			RFI dates – N/A based on VSS V1: 3.2.2.9. so accepted instead of using Nemko report			Criterion SN 209583 (Model A)	tested. SNs 34489 & 79602	
Electrostatic Disruption	4.8.3 (V2)	<p>Prem TSX ModA EMC 080327- 1227.pdf pg 4 (4/5/08) Criterion SN 209583 – Note A: No audio and equipment received at iBeta was not working.</p> <p>Prem TSX ModB EMC 080327- 1228.pdf pg 4 (4/5/08) Criterion SN 234758 - no audio equipment</p> <p>Prem TSX ModC EMC 080327- 1226.pdf pg 4 (4/8/08) SN 264782 – See Note A above.</p> <p>Prem TSX ModD</p>	<p>Prem OSAA EMC 080408- 1235.pdf gp 4 (4/8/08) Criterion SN is “None”</p>	<p>VAT A100 EMC 080327- 1225.pdf pg 4 (4/8/08) – Criterion 4/8/08 SN AM0105521108</p>	<p>Automark EMC 070730- 1165.pdf pg 4 (8/1/07) – Criterion SN AM0307420125</p>	<p>Prem TSR6 ModB EMC080331- 1231.pdf pg 4(4/4/08) – Criterion SN 934758 (Model B) Prem TSR6 ModA EMC 080331- 1230.pdf pg 4 (4/4/08) – Criterion SN 209583 (Model A)</p>	<p>080424- 1239.pdf pg 4 (4/25/08) – Criterion – Model D only SN 41407</p>	<p>Premier OSX EMC Test Report 071030- 1180.pdf pg 4 (2/1/08) – Criterion SN 500002 but the ballot box delivered to iBeta was not working and an updated ballot box needs to be tested.</p>

Attachment: Hardware Test Matrix and Review Details

		EMC 080327-1229.pdf pg 4 (4/5/08) SN 299340 – See Note A above.						
Electromagnetic Susceptibility	4.8.4 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	Automark EMC 070730-1165.pdf pg 4 (8/1/07) – Criterion SN AM0307420125	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758	Diebold AVOS 1968 -52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A and C were tested. SNs 34489 & 79602	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002
Electrical Fast Transient	4.8.5 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005 Same as A100	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758	Diebold AVOS 1968 -52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002

Attachment: Hardware Test Matrix and Review Details

							only Model A and C were tested. SNs 34489 & 79602	
Lightning Surge	4.8.6 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005 Same as A100	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758	Diebold AVOS 1968 -52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A and C were tested. SNs 34489 & 79602	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002
Conducted RF Immunity	4.8.7 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005 Same as A100	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 Diebold AVOS 1968 - 52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by	Diebold AVOS 1968 - 52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002

Attachment: Hardware Test Matrix and Review Details

						NEMKO in 6/22/06 which states that only Model A and C were tested. SNs 34489 & 79602 (4/4/08) – Criterion SN 934758	and C were tested. SNs 34489 & 79602	
Magnetic Fields Immunity	4.8.8 (V2)	Diebold 52501-07.pdf pg 28 (2/2/06) Model D only with AVPM 4.6.4 – Wyle UL/IEC60950 test run 3/27/06 – Serial number 259364, 250313, 271140, or 271160.	N/A	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005	AutoMARK EMC Test Report.pdf pg 5 (1/20/05) – Criterion SN005 Same as A100	Prem TSR6 ModB EMC 080331-1231.pdf pg 4 (4/4/08) – Criterion SN 934758	Diebold AVOS 1968 52501-10.pdf pg 51 (6/22/06) – Wyle Model D only but includes the test as run by NEMKO in 6/22/06 which states that only Model A and C were tested. SNs 34489 & 79602	Premier OSX EMC Test Report 071030-1180.pdf pg 4 (2/1/08) – Criterion SN 500002

Note A: The OSAA is not vote scanning, counting or DRE equipment and therefore is not subject to hardware environmental testing and only limited electrical testing

Note B: Review of the Engineering Changes indicates that only Models A and D will be tested.

Note C: There are no differences in the power subsystem between Models A and B therefore only the Model B will be evaluated for safety.

iBeta Analysis Details

TSX – SysTest appears to be using the NOC 08-01 Validity of Prior Non-Core Hardware Environmental and EMC Testing to re-use all previous testing after running the ESD. Concerns and resolutions are:

- 1) Resolved: The Safety testing was conducted on the older requirements. Accepted based on the RFI 2008-09 that has an effective date for all voting systems test plan submitted after the date of publication (August 25, 2008).
- 2) Resolved: The state of the machines during FCC Part 15b (conducted and radiated emission), Radiated Immunity, and (and whether or not executed in both audio and non-audio mode) as well as the OpStats are not defined but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 3) Resolved: Only Model D was tested in many but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 4) Resolved: AVPM was pre-production on many non-operating tests but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 5) Resolved: APT (non-accredited test lab) was used for vibration testing in April 2008. EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.
- 6) **NOT RESOLVED/Recommend ESD Re-test:** No audio equipment was part of the ESD test.
- 7) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as N/A in the Test Plan but it was stated as being run in the Diebold 52501-07.pdf test report Section 6.2.
- 8) Has the equipment used in the testing been delivered to iBeta for use in functional testing? The check for Serial Numbers 209583, 234758, 264782, and 299340 has found that:
 - a. 234758 in the equipment check – in
 - b. **NOT RESOLVED / Recommend ESD Re-test** – Tri Le confirmed on 12/3 that the unit was not working and it was sent for repair: 209583 - pulled from the "shipping" pile. It is marked: "Bad Motherboard 4/5/08".
 - c. **NOT RESOLVED / Recommend ESD Re-test** – Tri Le confirmed on 12/3 that the unit was not working and it was sent for repair: 264782 - pulled from the "shipping" pile. It is marked: "Bad Motherboard 4/5/08".
 - d. **NOT RESOLVED / Recommend ESD Re-test** – Tri Le confirmed on 12/3 that the unit was not working and it was sent for repair: 299340 - pulled from the "shipping" pile. It was marked:
"Inverter died during ESD testing 4/8/08"

"Replaced Inverter"

"Screen not turning on"

OSAA – SysTest again is using NOC 08-01. Concerns and resolutions are:

- 1) Resolved : Does iBeta concur with the N/A testing as stated in Note A as we will have to defend this position during Test Report review? Per VSS Vol 1, Section 3.2.2.5 through 3.2.2.12 states "Vote scanning and counting equipment ..." so not subjected to EMI/EMC. The OSAA does meet the requirements of VSS Vol 1, Section 3.2.2.13 Operating Environment as "Equipment used for election management..." and should have been tested and will be covered by functional testing at iBeta.

Attachment: Hardware Test Matrix and Review Details

- 2) Resolved: Wyle report but uses Nemko electrical test report that does not delineate the OSAA (unless it is ACPTR KIT) and the test was run on 12/09/04 which is outside the NOC 08-01 allowable time frame. This test is N/A as well so reuse of that Nemko report is not required.
- 3) Resolved: No Serial Numbers are listed for any of the test units in the Criterion Test Report. No units have SNs.

AutoMark A100 - SysTest again is using NOC 08-01. Concerns and resolutions are:

- 1) Resolved : The Safety testing was conducted on the older requirements. Accepted based on the RFI 2008-09 that has an effective date for all voting systems test plan submitted after the date of publication (August 25, 2008).
- 2) Resolved: APT (non-accredited test lab) was used for Vibration and Bench Handling in 2005. The EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.
- 3) Resolved: No SysTest personnel were present for Vibration and Bench Handling and all system OpStats were completed by Percept. The EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.
- 4) Resolved: On a number of Mil-STD 810D tests, no Serial Numbers were recorded on the test report AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 5) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as Y in the Test Plan and it was stated as being run in AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf with 3 units on page 7.
- 6) Resolved: CIS (non-accredited test lab) was used for safety testing in 2005. The EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.
- 7) Resolved: Has the equipment used in the testing been delivered to iBeta for use in functional testing? The check found that Serial Number AM0105521108 was delivered and checked-in (unit that was used for ESD testing). The check for SN 002 and 005 did not find the units but they were not used for ESD.
- 8) Resolved: NOC 2008-01 states that: "In order to check for potential problems with prior tests, for each voting system seeking the approval of prior testing, the VSTL or its designated sub contractor laboratory shall re-run the electrostatic disruption test noted below under Section 4.1.2.8 of the 2005 VVSG.1 The test is to be run with the unit under test processing ballots and saving cast vote records while the ESD is applied and that those records be examined and confirmed to be accurate and not corrupted during the test." Does Premier have access to the test results such that we can confirm that the system operation during the ESD and the test results per the NOC 2008-01? The VAT A100 EMC 080327-1225.pdf does state in Section 3.2.2 that the Performance Criterion 2 is the same as listed in the VSS Volume I Section 3.2.2.8.

AutoMark A300 – Concerns and resolutions are:

- 1) Resolved: For most of the testing, the A100 results are again submitted and there are no A300 results. Per the email from Sean Brockhouse, the description of the ECs that modified the A200 to the A300 was received and reviewed. The A100 results will be applied to the A300.
- 2) Resolved: No SysTest personnel were present for Vibration and Bench Handling and all system OpStats were completed by Percept . The EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.

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- 3) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as Y in the Test Plan and it was stated as being run in AutoMARK Voter Assist Terminal Test Report rev 1.3.pdf with 3 units on page 7.
- 4) Resolved: Has the equipment used in the testing been delivered to iBeta for use in functional testing? The check found that Serial Number AM0307420125 was delivered.

Accuvote – TS R6 DRE - Concerns and resolutions are:

- 1) Resolved: The Safety test was only conducted on Model B per Note C but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 2) Resolved: The Vibration was only on one model (153983) but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 3) Resolved: The High and Low temp, humidity, and Bench Handling were only run on one model (126544) but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 4) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as N/A in the Test Plan and it was stated as being run in Premier TSR6 Test Report.pdf and there is supporting documentation in the APT report Prem TSR6 ENV SysTest08-00600.pdf.
- 5) Resolved: The Vibration test was conducted with the equipment in the common carrier packing. Testing was conducted in accordance with V1 3.2.2.14 not to the requirement of transportation between precinct and polling place per V2 4.6.3.
- 6) Resolved: Has the equipment used in the testing been delivered to iBeta for use in functional testing? The ESD equipment is not in-house.

153883: AccuVote TS (R6) Model B Rev 4, EC#A2322, Lab 24, iBeta Tag #P032.

166544: was not delivered but not the ESD unit.

209583: was not delivered. Model A used for ESD (209583 is not a valid SN - but is a TSX Model A SN not a TS R6. Photos within the document clearly show a TS R6 within the chamber.)

934758: was not delivered. Model B used for ESD (934758 is not a valid SN – later in the report, 234758 is noted but this is a TSX Model B SN not a TS R6. Photos within the document clearly show a TS R6 within the chamber.

156584: was not delivered but not the ESD unit.

8 TS R6s were delivered to iBeta (SNs, 102066, 100143, 126544, 133847, 102076, 160495, 153983, and 102171). All units are in working order and SN 133847 is a Model B that, per the audit log, was active during the April 1 - April 5, 2008 test dates of the hardware report and the box has a Criterion label on it so it is being assumed that this is the unit that went through ESD testing successfully. Based on the audit logs from the Model A units, it was unclear which unit went through testing as some had had firmware upgrades which reset the audit log..

Attachment: Hardware Test Matrix and Review Details

AccuVote OS – Note B is substantiated in the Wyle report in Section 4.1 and is acceptable. Concerns and resolutions are:

- 1) Resolved: The Vibration was only on one Model (34026 Model D) but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 2) Resolved: The Vibration test was conducted with the equipment in the common carrier packing per V1 3.2.2.14 not in the requirement of transportation between precinct and polling place per V2 4.6.3.
- 3) Resolved: The High and Low temp, humidity, and Bench Handling were only run on one model (80707 Model A) and the SysTest AVOS Test Report does not provide rationale.) but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 4) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as N/A in the Test Plan and it was stated as being run in Diebold 48619-09 AVOS Revision B.pdf in Attachment G.
- 5) Resolved: NEMKO ran all EMI/EMC except ESD in 2006 – were they NVLAP or A2LA accredited in those methods at that time? The reuse of test results is approved by re-run of the ESD per RFI 2008-01.
- 6) Resolved: NEMKO only ran tests on Model A and C but based on the re-use letter and RFI 2008-01, these are accepted based on the validity of the ESD results.
- 7) Resolved: Criterion tested Model D only with no documentation as to the analysis to exclude Models A, B, and C. Action to iBeta to review documentation for rationale – that equipment, SN 41407 Model D was returned for normal maintenance.
- 8) Resolved: Has the equipment used in the testing been delivered to iBeta for use in functional testing? ESD testing was 41407.
 - 34026: AccuVote OS Model B Rev 1 , EC#6419, needs EC#A2322, Lab 24, iBeta Tag #P038.
 - 41407: AccuVote OS Model D Rev 4, pulled from the shipping pile awaiting check-in.
 - 34490: was not delivered
 - 79602: was not delivered
 - 80787: AccuVote OS Model, pulled from the shipping pile awaiting check-in.

AccuVote OSx – Concerns and resolutions are:

- 1) Resolved: APT and CIS (non-accredited test labs) were used for testing. The EAC Letter 11.20.08 to Premier on reuse of testing approved use of these test results.
- 2) Resolved: The Maintainability requirement (163 hour test) of VSS V1 Section 3.4.3.a and V2 4.7.2 is marked as N/A in the Test Plan and it was stated as being run in Premier OSX Env Systest08-00226 there is a statement in Section 4-24 stating that it was run.
- 3) **NOT RESOLVED / Recommend ESD Re-test:** Other concern is the ballot box for the OSx was a demo and was placed in the "shipping" pile. The box has an old FedEx shipping label on it stating that it had been shipped to Criterion. Premier stated that it needs to be repaired. The Criterion Report does not contain any information on the ballot box that was used but does list 2 points were tested for air and contact ESD. The concern is that this ballot box does have electronics in it (for ballot guidance to the 2 ballot bins) and may have been used during the ESD testing. The ballot box has been upgraded and the old one was shipped back to Premier. This new ballot box will need to go through ESD testing at a minimum and perhaps the rest of the EMI/EMC – the EC for the ballot box upgrade will need to be evaluated.

- 4) Resolved: Has the equipment used in the testing been delivered to iBeta for use in functional testing? ESD testing was 2.

11: pulled from the shipping pile awaiting check-in.

14: pulled from the shipping pile awaiting check-in.

24: pulled from the shipping pile awaiting check-in – but then was sent back to Premier for repair (yes and no button were not functional).

50002: was not delivered. 13 was but was sent back to Premier and is working. 50002 is stated in both the documents from SysTest and Criterion (SN 500002). The SysTest report also has 500011, 500014, and 500024 and the APT and Safety Report also echo these SNs. Since only 4 units had been delivered to SysTest at the time of the hardware testing, it makes sense that 14 was at CIS for safety testing, 11 and 24 were at APT for MIL-STD 810D testing, and 500002 AKA 13 was at Criterion. Based on this assessment and the fact that there is only one model of the OSx and the pictures in the Criterion report show an OSx, the test results are accepted.